The Changing Outlook in Coronary Disease

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SUMMARY

The statistical prognosis for patients who survive a first attack of coronary thrombosis, as regards both life expectancy and ability to return to normal activity, has been greatly improved in recent years. In the light of advances in understanding of the physiology of the heart and improvements in therapeutic methods, physicians must reevaluate ideas of what a patient should be permitted to do after recovery from an initial attack. Often a return to normal pursuits may be better for the patient than drastic restriction of activity, particularly because of the psychological and emotional effects of invalidism.

In deciding what advice to give on this score, the physician should consider in each case not only the actual amount of coronary circulation but such factors as the patient's temperament, type of occupation and economic status. The goal should be to guide each patient back to usefulness within the limits of his cardiac reserve.

PHYSICIANS and patients of the present generation are well aware that heart disease is the most common cause of death in the United States. Are they conscious, as well, of the more favorable outlook afforded to persons who have acute attacks of coronary thrombosis? For many years victims of coronary disease have been so instilled with a fear of sudden death or a dread of permanent invalidism that the ensuing psychological effects have seriously limited physicians in providing the proper care and rehabilitation for these patients.

While it is true that 15 to 25 per cent of patients with coronary thrombosis die of the first attack, the work of cardiologists who have recently examined the records of patients known to have survived this danger period indicates urgent need for a reevaluation of prognosis in this disease. Emphasis should be placed on a more optimistic outlook with regard to the life expectancy of the patient, and, even more important, physicians must recognize that a return to a certain amount of normal activity may be permitted in many cases.

Not only has the modern physician's ability to make a prompt diagnosis of coronary thrombosis contributed to the changing outlook in this disease, but the distinct advance in treatment which has been made during the past few years has further increased the chances for recovery of the patient. Recent studies on the graphic interpretation of the anatomy of the coronary circulation have made for a better understanding of the physiology of the heart, which in turn has led to new methods which now enable the physician to decrease the incidence of embolic phenomena in some cases and to save lives in others in which emboli have already developed. Therapeutic methods have been importantly improved by the development of the anticoagulants, dicoumarol and heparin.

No single condition in clinical medicine presents a more difficult problem in prognosis than coronary disease. Because of the complexity of the individual factors involved, and because the amount of damage done to the heart cannot be determined from clinical tests alone, prognosis must be based largely on the consideration of each patient's functional capacity.

The underlying basis of the coronary sclerosis and the manner in which it has developed are the determining factors in the physician's estimate of the patient's life expectancy. The task is to discover the degree of coronary insufficiency and to determine whether the disease is pursuing a progressive or non-progressive course. If the obliterative process has been gradual, permitting the compensatory mechanism of anastomosis to come into play, the heart may be enabled to create new channels which would insure an adequate collateral blood supply and serve not only to prevent severe shock but to limit the size of the infarct as well.

Although coronary disease occurs predominately in middle age, it can and does occur at various ages and in persons of all occupations. The fact that attacks of coronary thrombosis have long been known to be more prevalent among intelligent persons occupying positions of responsibility lends credence to the belief that those who are subject to irregular living habits and excessive mental and emotional strain are more vulnerable to this malady. Ultimate prognosis is generally poor if the patient is over 60 years of age at the time of onset, or if obesity is present, or multiple attacks have occurred, or angina pectoris has preceded the attack. On the other hand, ultimate prognosis is favorable if the patient is in the younger age group and there is evidence that the disease of the vessels has been arrested and an anastomotic circulation has developed.

Competent cardiologists now discredit past beliefs that the influence of activity and a return to work exerted a dire effect on the subsequent course of coronary disease. It is no longer felt that the presence of coronary disease, in any or all of its manifestations, does, in itself, necessitate a permanent withdrawal from normal activity. Therefore,

the present day consensus has reversed the viewpoint that susceptibility to attack, to heart failure, angina, and, ultimately, to death are increased by moderate exertion. It has been found that the majority of patients can begin gradual resumption of former activities as early as three months following the initial attack, although in this respect each case must be judged in the light of the individual factors involved.

The physician will encounter difficulties in determining the amount of activity the patient can tolerate if he relies solely on an estimation of the anatomical changes which have occurred, or on the electrocardiographic records, which are inclined to show variance. His opinion should be based almost entirely on his approximation of the actual amount of coronary circulation present and on whether it is sufficient to provide for the ordinary effort in which the patient indulges. Whereas the appearance of mild symptoms upon the resumption of work can, at times, be looked upon as no cause for alarm, it is important that the patient who resumes his former occupation should be free from any evidences of angina or heart failure. Statistics have proved that effort has no appreciable effect in producing recurrent attacks of coronary thrombosis. It is, nevertheless, very difficult to convince the layman that an attack, which may have occurred during the work hours, was due more probably to cardiac weakness caused by the physical inactivity and under-nutrition during the period of the patient's unemployment, than to the actual physical exertion.

No single standard can be applied to an individual case. A broad outlook that takes into consideration such factors as the patient's temperament, type of occupation and economic status is necessary in the estimation of each indivdual's capacity for rehabilitation. The goal in every case, however, should be to guide the patient back to usefulness within the limits of his cardiac reserve. The physician must recognize the danger in, and do his utmost to combat the tendency toward cardiac neurosis which may render the patient completely unable to carry on a gainful occupation which his heart could stand or, indeed, from which it might even benefit. The patient must be convinced by the sympathetic attitude and careful explanation of the physician that mental and emotional strain, rather than physical effort, are the factors which tend to shorten his life, and he must be made to realize that mild activity and moderate living will benefit rather than harm him.

For companies in the field of industry and disability insurance, the determination of responsibilities regarding the support of patients with coronary disease has long been considered difficult. Uncertainty and varying points of view with regard to the establishment of definite criteria concerning the total or permanent disability of the patient, and conflicting prognoses of the past, have made it difficult for these companies to distinguish between persons deserving of disability payments and those whom they have often found themselves forced to support for years after a physician had estimated the prognosis as hopeless.

In the light of recent advances which have led to the conclusion that prognosis may be favorable for 75 per cent of persons who survive an initial acute myocardial infarction, the question of whether the patient shall return to his former occupation has been made a new and more pressing responsibility for the physician. It is, therefore, not only out of concern for the patient, whose life might be made, unnecessarily, a tragedy of fearfulness and inactivity, but out of fairness to employers and insurance organizations, as well, that physicians must personally reevaluate this problem and consider it their duty to impress their patients with the new and changing outlook in coronary disease.

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